

1. An exercising device for strengthening body members comprising:

(a) first and second deflectable vessels for containing fluid therein;

(b) first valve means, fluid coupled to said first deflectable vessel, having a low fluid impedance for fluid flow out of said first deflectable vessel in a first direction and a high fluid impedance for fluid flow in a second direction opposite said first direction;

(c) second valve means, fluid coupled to said second deflectable vessel, having a low fluid impedance for fluid flow out of said second deflectable vessel in said second direction opposite said first direction, and a high fluid impedance for fluid flow in said first direction; and

(d) fluid pressure measuring means, fluid coupled between said first and second valve means, for measuring fluid impulse pressure produced by deflection of said first and second deflectable vessels in turn produced by motion of said body members.

2. The exercising device of claim 1 wherein said first and second deflectable vessels are flexible bladder members configured to fit into an exerciser's hands.

3. The exercising device of claim 1 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small fluid conducting passageway for severely restricting fluid flow therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

4. The exercising device of claim 2 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small fluid conducting passageway for severely restricting fluid flow therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

5. An exercising device for strengthening body members comprising:

(a) first and second deflectable vessels for containing fluid therein;

(b) first valve means, fluid coupled to said first deflectable vessel, having a low fluid impedance for fluid flow out of said first

deflectable vessel in a first direction and a high fluid impedance for fluid flow in a second direction opposite said first direction;

(c) second valve means, fluid coupled to said second deflectable vessel, having a low fluid impedance for fluid flow out of said second deflectable vessel in said second direction opposite said first direction, and a high fluid impedance for fluid flow in said first direction; and

(d) a fluid pressure measuring means, fluid coupled between said first and second valve means, for measuring fluid impulse pressure produced by deflection of said first and second deflectable vessels in turn produced by motion of said body members; and

(e) wherein said first and second valve means are configured so as to together present a substantially constant fluid impedance to the flow of fluid through both valve means in said first and said second directions regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by various persons.

6. The exercising device of claim 5 wherein said first and second deflectable vessels are flexible bladder members configured to fit into an exerciser's hands.

7. The exercising device of claim 5 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small

fluid conducting passageway for severely restricting fluid flow therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

8. The exercising device of claim 6 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small fluid conducting passageway for severely restricting fluid flow therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

9. An exercising device for strengthening body members comprising:

(a) first and second deflectable vessels for containing fluid therein;

(b) first valve means, fluid coupled to said first deflectable vessel, having a low fluid impedance for fluid flow out of said first deflectable vessel in a first direction and a high fluid impedance for fluid flow in a second direction opposite said first direction;

(c) second valve means, fluid coupled to said second deflectable vessel, having a low fluid impedance for fluid flow out of said second deflectable vessel in said second direction opposite said first direction, and a high fluid impedance for fluid flow in said first direction; and

(d) fluid coupling means for fluid coupling said first and second valve means together.

10. The exercising device of claim 9 wherein said first and second deflectable vessels are flexible bladder members configured to fit into an exerciser's hands.

11. The exercising device of claim 9 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small fluid conducting passageway for severely restricting fluid flow therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

12. The exercising device of claim 10 wherein each valve means includes a first and second valve member, movable with respect to each other, and wherein said first valve member has a small fluid conducting passageway for severely restricting fluid flow

therethrough, and wherein said second valve member has a fluid conducting passageway that is large relative to said small fluid conducting passageway for facilitating relatively unrestricted fluid flow.

13. The exercising device of claim 9 wherein said first and second valve means are configured so as to together present a substantially constant fluid impedance to the flow of fluid through both valve means in said first and said second directions regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by various persons.

14. The exercising device of claim 10 wherein said first and second valve means are configured so as to together present a substantially constant fluid impedance to the flow of fluid through both valve means in said first and said second directions regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by various persons.

15. The exercising device of claim 11 wherein said first and second valve means are configured so as to together present a substantially constant fluid impedance to the flow of fluid through both valve means in said first and said second directions regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by various persons.

16. The exercising device of claim 12 wherein said first and second valve means are configured so as to together present a substantially constant fluid impedance to the flow of fluid through both valve means in said first and said second directions regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by various persons.

17. A method of exercising a pair of first and second body members comprising the steps of:

(a) providing an exercising device having first and second deflectable vessels for creating fluid pressure impulses produced by squeezing fluid contained therein by said first and second body members respectively, together with fluid impedance means fluid coupled between said first and second deflectable vessels for presenting a substantially constant fluid impedance to the flow of fluid therethrough in first and said second directions opposite to each other, regardless of variations in fluid impulse pressures created by deflection of said deflectable vessels by persons having widely varying strengths; and

(b) alternately squeezing said first and second deflectable vessels forcing fluid through said fluid impedance means in first and second directions respectively, over an exercising period for strengthening said first and second body members.

18. The method of claim 17 further including the step of measuring fluid impulse pressure produced by deflection of said first and second deflectable vessels, indicating progressive strengthening of said body members over substantial time periods.

19. The method of claim 17 wherein step (b) is carried out by alternately squeezing said first and second deflectable vessels by a person's hands.

20. The method of claim 18 wherein step (b) is carried out by alternately squeezing said first and second deflectable vessels by a person's hands.